

SS12 THRU SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 1.0 Ampere

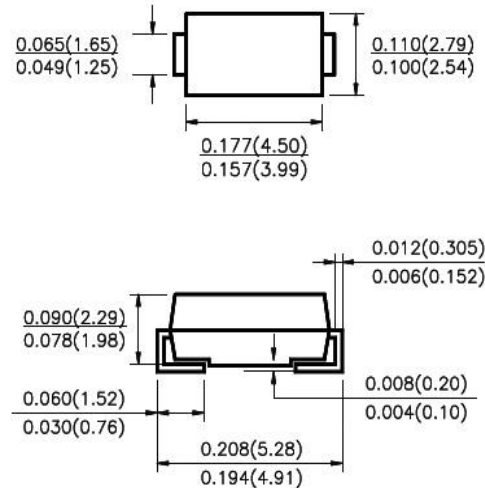
FEATURES

- ◆ Low profile surface mount package
- ◆ Built-in strain relief
- ◆ High switching speed
- ◆ Low voltage drop, high efficiency
- ◆ For use in low voltage high frequency inverters,
- ◆ Free willing, and polarity protection applications
- ◆ Guarding for over voltage protection

Mechanical Data

- ◆ Case: Transfer molded plastic
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ P Lead: Solder plated, solderable per MIL-STD-750 method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Weight: 0.002 ounce, 0.064 gram

DO-214AC (SMA)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	VOLTS
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	VOLTS
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	VOLTS
Maximum Average Forward Rectified Current at T _L see figure 1 T _L = 105°C	I _(AV)	1.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								Amps
Maximum instantaneous forward voltage at 1.0A (NOTE 1)	V _F	0.55		0.70		0.85				VOLTS
Maximum DC Reverse Current at rated DC Blocking Voltage per element	I _R	T _A = 25°C	0.5							mA
		T _A = 100°C	20.0		10.0					
Typical Thermal Resistance (NOTE 2)	R _{θJA}	50								°C/W
	R _{θJL}	12								
Operating Junction Temperature	T _J	-55 to +125								°C
Storage Temperature Rang	T _{STG}	-55 to +150								°C

Note: 1. Thermal Resistance from Junction to Ambient at 5.0 × 5.0mm² copper pad areas.

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RATING AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

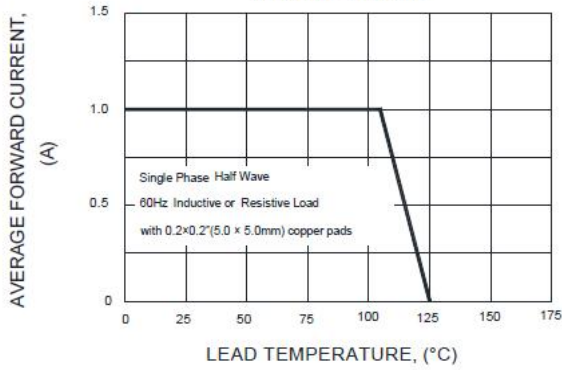


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

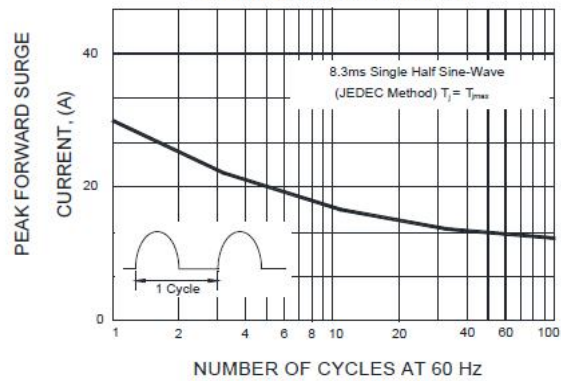


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

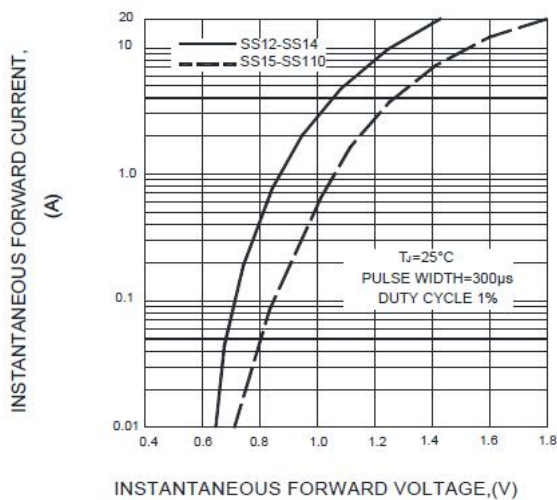


FIG.4-TYPICAL REVERSE CHARACTERISTICS

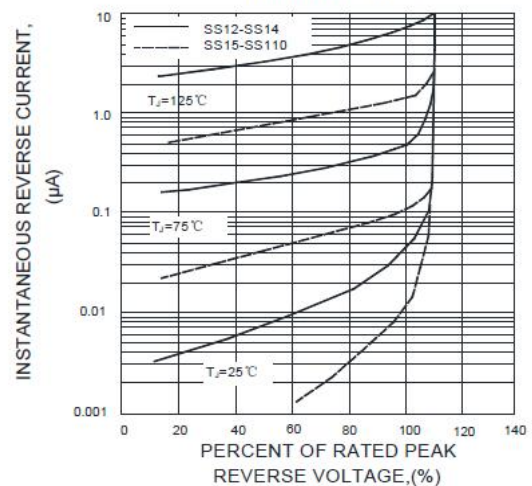
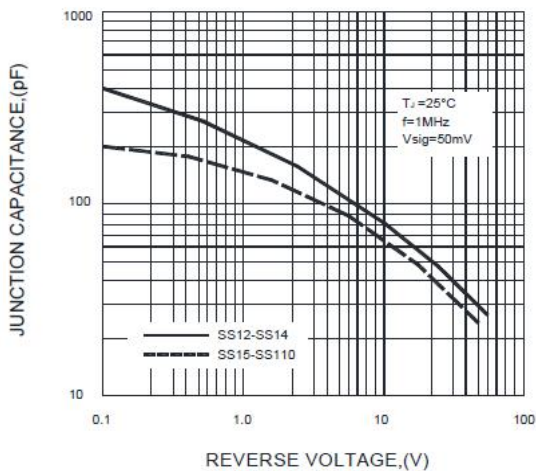


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.